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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,079	05/15/2001	Nigel M-F Cheung	10008017-1	2713

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HEWLETT-PACKARD COMPANY
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EXAMINER

MENBERU, BENIYAM

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/858,079

Applicant(s)

CHEUNG, NIGEL M-F

Examiner

Beniyam Menberu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 13-18 is/are allowed.
- 6) ☒ Claim(s) 7 and 9-11 is/are rejected.
- 7) ☒ Claim(s) 8 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed September 1, 2006 have been fully considered but they are not persuasive. The Applicant argues that Temes merely discloses a dark current scan, but does not teach a full calibration scan as recited in claim 7. The specification of the current application defines the full calibration to be both a dark current scan and a PRNU scan (note page 4 last line of the first paragraph). Temes invention is a pixel non-uniformity correction system which compensates for photosite non-uniformities (interpreted as applicants PRNU scan) utilizing three modes, one of which being a dark current detection mode (col. 1, lines 1-6). Therefore, Temes at least inherently teaches a full calibration scan and the rejection is maintained. Secondly, the Applicant argues that Lehman fails to teach adjusting the gains globally when the differences between the partial and full calibration scan is less than a predetermined amount. Again, relying on the specification of the current application for the definition of a "global" gain, no distinguishing definition was disclosed, thus the claim is broadly interpreted as adjusting the gains when the differences between the partial and full calibration scan is less than a predetermined amount. Turning to Lehman, there are reference signals R1-R3 obtained and when the differences are compared to the desired standard value (read as the claimed predetermined amount), a gamma (or gain) corrector is used to bring the output to the desired standard value. Therefore, the rejection of Temes in view of Lehman is maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4602291 to Temes in view of U.S. Patent No. 5424537 to Lehman et al.

Regarding claim 7, Temes discloses a method of calibrating a scanner, comprising the steps of (column 2, lines 4-20):
performing a full calibration scan (column 2, lines 52-62);
performing at least one partial calibration scan (column 2, lines 63-68; column 3, lines 1-1-5);
comparing the full calibration scan to the partial calibration scan (column 3, lines 1-24).
However Temes does not disclose adjusting the gains globally for the full calibration scan when the difference between the partial calibration scan and the full calibration scan is less than a predetermined amount.

Lehman et al disclose adjusting the gains globally for the full calibration scan when the difference between the partial calibration scan and the full calibration scan is less than a predetermined amount (Lehman et al discloses performing linear calibration, logarithmic calibration, and output sensitivities to gain changes calibration. For example the logarithmic calibration consists of setting values within limit (column 10, lines 16-21, 25-27, lines 32-35, lines 39-41). When these calibrations are done these values are

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within limit of acceptable values reading on "when the difference between the partial calibration scan and the full calibration scan is less than a predetermined amount".

Further Lehman et al discloses adjusting gains after the initial gain as explained above have been accomplished meaning that the values are within limits at this point (column 11, lines 17-47).) Further Lehman et al discloses of a "system" gain which reads on global gain (column 7, lines 45-48; column 10, lines 32-35).).

Temes and Lehman et al are combinable because they are in the similar problem area of image scanner calibration.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the gain adjustment of Lehman et al with the scanner calibration system of Temes to implement gain adjustment following initial calibration as taught by Lehmen et al.

The motivation to combine the reference is clear because Lehman et al teach that the output can be adjusted to desired level by changing gains due to difference in outputs (column 10, line 32-41).

Regarding claim 9, Temes in view of Lehman et al teach all the limitations of claim 7. Further Temes discloses the method of claim 7 where the partial calibration scan does not turn off the scanner lamp (column 2, lines 63-68).

3. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4602291 to Temes in view of U.S. Patent No. 5424537 to Lehman et al further in view of U.S. Patent No. 5384699 to Levy et al.

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Regarding claim 10, Temes in view of Lehman et al teaches all the limitations of claim 7. However Temes in view of Lehman et al does not disclose the method of claim 7 where the partial calibration scan is done periodically.

Levy et al discloses wherein the partial calibration scan is done periodically (column 14, lines 3-17).

Temes, Lehman et al, and Levy et al are combinable because they are in the similar problem area of image scanner calibration.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the periodic calibration taught by Levy et al with the system of Temes in view of Lehman et al to implement periodic calibration of image scanners.

The motivation to combine the reference is clear because Levy et al provides for a calibration system wherein the scanner is calibrated before failure occurs thus providing a reliable scanning system (column 2, lines 66-68; column 3, lines 1-3).

Regarding claim 11, Temes in view of Lehman et al further in view of Levy et al teaches all the limitations of claim 10. Further Levy et al disclose the method of claim 10 where the period between partial calibration scans is based on time (column 14, lines 3-17).

Allowable Subject Matter

4. Claims 1-6, 13-14, 15-16, and 17-18 are allowed.
5. The following is an examiner's statement of reasons for allowance: Claims 1, 13, 15, and 17 are allowed for the reasons pointed out by Applicant's remarks (page 7, section IV, 3rd paragraph; page 11, 3rd and 4th paragraph; page 12, 1st paragraph; page 8, section V, 3rd paragraph; page 9, 1st paragraph). Claims 2-6, 14, 16, and 18 are then inherently allowable for depending on an allowable base claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Claims 8 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other Prior Art Cited

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6172772 to Steinle et al disclose scanner with compensation calculation.

U.S. Patent No. 6900448 to Thompson discloses calibration for scanners.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beniyam Menberu whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov/>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Beniyam Menberu

BM

11/27/2006


KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER